

neurotoxin of the same type and from the same species, wherein said light chain is inactivated by at least one said amino acid mutation, and

ii) an unaltered Clostridial neurotoxin heavy chain which has binding specificity for a target nerve cell; and

b) a drug or other bioactive molecule joined to the inactivated light chain of said inactive neurotoxin,

wherein said inactive neurotoxin is internalizable by said target nerve cell.

38. (Twice Amended) A pharmaceutical composition for treatment of a neuromuscular dysfunction in a mammal, comprising:

a) an inactive Clostridial neurotoxin comprising

i) a[n inactivated] light chain containing one or more amino acid sequence mutation as compared to the amino acid sequence of the light chain of a wild-type Clostridial neurotoxin of the same type and from the same species, wherein said light chain is inactivated by at least one said amino acid mutation, and

ii) an unaltered Clostridial neurotoxin heavy chain which has binding specificity for a target nerve cell; and

b) a drug or other bioactive molecule joined to the inactivated light chain of said inactive neurotoxin,

wherein said inactive neurotoxin is internalizable by said target nerve cell, and

a pharmaceutically acceptable excipient.

42. (Twice Amended) A method for treating a mammal having acute botulinum poisoning, comprising:

introducing into said mammal an effective quantity of a pharmaceutically active solution comprising

a) an inactive Clostridial neurotoxin comprising

i) a[n inactivated] light chain containing one or more amino acid sequence mutation as compared to the amino acid sequence of the light chain of a wild-type Clostridial neurotoxin of the same type and from the same species, wherein said light chain is inactivated by at least one said amino acid mutation, and